

Honeywell Docket No. 30-4959 DIV2 - 4780
Bingham Docket No.: 7211445002-3221000

IN THE SPECIFICATION

Please replace the paragraph immediately before the "Field of the Invention" with the following amended paragraph:

This application is a divisional of issued Patent No. 6,675,456, which is a divisional of US Issued Patent No.: 6,560,844.

Please replace paragraph [0012] that begins on page 2, line 18 with the following paragraph:

[0012] Referring to figure 3, a preferred method of lamination comprises: step 100, providing a plurality of layers 30 to be laminated; step 200, determining the TCE of the layers 30 to be laminated; step 300, providing an alignment plate 10 having approximately the same TCE, and step 400, stacking the plurality of layers 30 onto the alignment plate 10. If layers 30 and alignment plate 10 have the same TCE, the layers and plate will expand and contract together. In preferred embodiments, an alignment plate 10 will have a TCE close enough to the TCE of the layers as to maintain an alignment of $\pm 5\text{-}20\mu\text{m}$. For polyimide film layers, copper alignment plates will likely have TCEs which match the TCEs of the layers sufficiently as to maintain an alignment of $\pm 5\text{-}20\mu\text{m}$. Approximately the same as used in regard to the TCEs of the alignment plate 10 and layers 30 simply means that any difference in expansion and contraction of the copper plate 10 relative to layers 30 is small enough so that any misalignment caused by any such difference falls within acceptable bounds. However, it is contemplated that it would be particularly beneficial if the greatest difference between the TCE of alignment plate 10 and the average TCE of the layers be less than 2 ppm/°C (parts per mill°C).

Please replace paragraph [0013] on page 3:

Preferred methods will also comprise: ~~lazing~~ drilling registration/alignment holes 32 in the layers 30 to be laminated, the registration holes 32 having a diameter at least as large as the diameter of the tooling pins 12 of the alignment plate 10. The tooling pins 12 have at least the same diameter as the alignment/registration holes 32 in the layers 30 so as to prevent any movement of the layers 30 once they are positioned on the pins. The need for overly large registration holes to compensate for different rates of expansion between the alignment plate 10 and layers 30 is minimized if layers 30 and alignment plate 10 have similar TCEs. It is contemplated that ~~lazing~~ drilling the registration holes 32 such that their diameters are at least 0-5 μ m smaller than the diameter of the tooling pins would be particularly beneficial.